Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for imaging a plurality of individual anatomical parts of the human anatomy by means of an X-ray apparatus, the method comprising the steps of:

acquiring at least one initial projection image of at least a region of interest of the human anatomy and retaining acquisition settings for the at least one initial projection image,

determining the positions and/or orientations for each of the plurality of individual anatomical parts in the region of interest from the at least one initial projection image ~~and/or from other sources of information~~,

determining locally adapted optimum imaging parameters for each of the plurality of individual anatomical parts from ~~their~~ (i) the determined positions and/or orientations of respective individual anatomical parts and (ii) the retained acquisition settings for the at least one initial projection image, wherein the locally adapted optimum imaging parameters include one or more settings of projection line position, projection line direction, collimation, and exposure, and

acquiring projection images for each of the plurality of individual anatomical parts ~~while~~ by dynamically using respective ones of the locally adapted optimum imaging parameters for each of the plurality of individual anatomical parts.

2. (Previously Presented) A method as claimed in claim 1, wherein optimum exposure and/or collimator settings are determined from the positions, orientations and/or appearance of the anatomical parts in the at least one initial projection image.

3. (Previously Presented) A method as claimed in claim 1, wherein optimum projection lines for acquiring projection images of the anatomical parts are determined from the positions and/or orientations of the anatomical parts.

4. (Previously Presented) A method as claimed in claim 1, wherein the at least one initial projection image is taken as a frontal image and/or a lateral image.

5. (Previously Presented) A method as claimed in claim 1, wherein the at least one initial projection image is an overview image reconstructed from at least two projection images.

6. (Previously Presented) A method as claimed in claim 1, wherein an optimum projection line is determined for each anatomical part in the region of interest.

7. (Previously Presented) A method as claimed in claim 1, wherein the acquired images of the anatomical parts are displayed separately or are combined to form a composite image for display.

8. (Currently Amended) A method as claimed in claim 1, wherein the method is used for imaging the human spine and comprises the steps of:

acquiring at least one initial projection image of at least a region of interest of the spine,

determining positions and/or orientations of each ~~of a plurality of~~ vertebrae in the region of interest from the at least one initial projection image,

determining locally adapted optimum imaging parameters for each ~~of the plurality of~~ vertebrae from ~~their~~ (i) the determined positions and/or orientations of respective vertebrae and (ii) the retained acquisition settings for the at least one initial projection image, and

acquiring projection images of each ~~of the plurality of~~ vertebrae ~~while~~ by dynamically using respective ones of the locally adapted optimum imaging parameters.

9. (Currently Amended) An X-ray apparatus for imaging a plurality of anatomical parts of the human anatomy of a patient, in particular parts of the human spine, having an x-ray source and an x-ray detector facing the x-ray source, the x-ray source and the x-ray detector being movable with respect to each other and with respect to the patient so as to enable the acquisition of projection images of each of the plurality of anatomical parts from different positions and/or orientations, the x-ray apparatus comprising:

a control unit for controlling the x-ray apparatus ~~such that~~ to acquire at least one initial projection image of at least a region of interest of the human anatomy ~~is acquired~~ and to retain acquisition settings for the at least one initial projection image, and

a processing unit for determining the position and/or orientation of individual anatomical parts in the region of interest from the at least one initial projection image ~~and/or from other sources of information~~ and for determining locally adapted optimum imaging parameters for each of the plurality of individual anatomical parts from ~~their~~ (i) the determined positions and/or orientations of respective individual anatomical parts and (ii) the retained acquisition settings for the at least one initial projection image, wherein the locally adapted optimum imaging parameters include one or more settings of projection line position, projection line direction, collimation, and exposure, ~~the optimum imaging parameters being used by~~ the control unit ~~to control~~ further for controlling the x-ray apparatus ~~such that~~ to acquire projection images of each of the individual anatomical parts by dynamically using respective ones of the locally adapted optimum imaging parameters ~~are acquired~~.

10. (Currently Amended) A method for imaging the human spine comprising the steps of:

acquiring at least one initial projection image of at least a region of interest of the spine and retaining acquisition settings for the at least one initial projection image,

determining positions and/or orientations of each vertebrae in the region of interest from the at least one initial projection image, the positions and/or orientations including a spinal axis line and a tilt angle per vertebrae,

determining locally adapted optimum imaging parameters for each of the vertebrae from ~~their~~ (i) the determined positions and/or orientations of respective vertebrae and (ii) the retained acquisition settings for the at least one initial projection image, wherein the locally adapted optimum imaging parameters include one or more settings of projection line position, projection line direction, collimation, and exposure, and

acquiring projection images of each of the vertebrae ~~while~~ by dynamically using the corresponding locally adapted optimum imaging ~~parameter for that~~ parameters for each respective vertebrae.

11. (Previously Presented) A method as claimed in claim 1, further comprising the step of generating a scanning trajectory prior to the step of acquiring images, and wherein the step of acquiring images of the plurality of anatomical parts includes the step of moving at least one device along the scanning trajectory.

12. (Previously Presented) A method as claimed in claim 6, further comprising the step of generating a scanning trajectory using the optimum projection line determined for each anatomical part in the region of interest, prior to the acquiring images step.

13. (Previously Presented) A method as claimed in claim 9, wherein the x-ray source and x-ray detector are moved along a scanning trajectory for acquiring the images.

14. (Previously Presented) A method as claimed in claim 10, further comprising the step of generating a scanning trajectory prior to the step of acquiring images, and wherein the step of acquiring images of each of the vertebrae includes the step of moving at least one device along the scanning trajectory.